

*Mark D*

5. (Amended) A recuperative heat exchanger for the exchange of heat across a heat transferring plate between a first fluid medium and a second fluid medium, said fluid mediums flowing in opposite directions to each other on opposite sides of said plate, said heat exchanger comprising:

a generally rectangular casing for containing a heat transferring package therein, said casing having a top end, a bottom end, a pair of respective lengthwise and widthwise opposed sides which define four corners, each of said corners defining a length and a width of said casing, provided with one of an inlet and a outlet port, wherein a pair of inlet and outlet ports is dedicated to one of said first and second [medians] mediums for flow therethrough, said ports disposed at a respective corner such that a fluid entering and exiting a respective corner does so at an angle of 45 degrees with respect to either side which forms the respective corner;

a heat transfer package disposed within said casing having a lengthwise extent and a widthwise extent [direction disposed within said casing], said package comprised of a plurality of generally rectangularly shaped plates continuously arranged in an accordion-like manner, each of said plates having an exacting length, width and thickness to each other, each of said plates integrally [formed with] connected to an adjacent plate along said length, said [and having a pair of opposing sides and a] length and [a] width of said casing substantially corresponding to said [lengthwise] length and [widthwise directions] width of said package, a common side from each adjacent plate facing one another and defining an inter-layer space therebetween for receiving a flow of one of said fluid [medians] mediums therebetween, said flow of each medium into each inlet port directed to contact said heat transfer package at an angle of 45 degrees, each medium having a widthwise element and a lengthwise element when flowing within said inter-layer space, each of said plate sides having a corrugated pattern formed therein, said corrugated pattern corresponding to a series of alternating ridges and channels formed at an angle of at least 45 degrees with respect to said length of said plate, said